

0590
1204

#2

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001
 TIME: 14:05:49

Input Set : A:\Bms41211.app
 Output Set: N:\CRF3\11212001\I988971.raw

ENTERED

3 <110> APPLICANT: BRISTOL-MYERS SQUIBB COMPANY
 5 <120> TITLE OF INVENTION: CLONING AND EXPRESSION OF HUMAN SLAP-2: A NOVEL
 6 SH2/SH3 DOMAIN-CONTAINING HUMAN SLAP HOMOLOGUE HAVING
 7 IMMUNE CELL-SPECIFIC EXPRESSION
 9 <130> FILE REFERENCE: D0043PCT
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/988,971
 C--> 12 <141> CURRENT FILING DATE: 2001-11-20
 14 <150> PRIOR APPLICATION NUMBER: 60/252545
 15 <151> PRIOR FILING DATE: 2000-11-22
 17 <160> NUMBER OF SEQ ID NOS: 7
 19 <170> SOFTWARE: PatentIn Ver. 2.1
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 2567
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Homo sapiens
 26 <400> SEQUENCE: 1
 27 cccacgcgtc cggtcggagc tagagctcca aggacccac gcctgtgtct ctgtgacaga 60
 28 gctcaaaagg ccttgggect tccctccctg gctcggctgt gcttgggagg gttccccagt 120
 29 ccagaatccc taaggagcat ggggcagctg atccatccct ggtgtacaaa ctgctgactg 180
 30 cagacagatg ctgagctacc caaaccaaca cctagcctct ccctgaagat cctcccaggc 240
 31 tgagagagtt ctgggtgtcc taggaccaag gacactggca gacttccaga agggcccca 300
 32 aagccctaac ctgtccagcc agagcatgcg tctcagcaga gctgtcttcc caagcctttg 360
 33 atgacaaacc aatttccctc gatgatgtgc ttctgagtgc tctgctgagg aacaatggga 420
 34 agtctgcccc gcagaagaaa atctctgcca agcccaagct tgagttctc tgtccaaggc 480
 35 cagggacctg tgacctgga agcagagaga agcaaggcca cagccgtggc cctgggcagt 540
 36 ttcccggcag gtggcccggc cgagctgtcg ctgagactcg gggagccatt gaccatcgtc 600
 37 tctgaggatg gagactggtg gacggtgctg tctgaagtct caggcagaga gtataacatc 660
 38 cccagcgtcc acgtggccaa agtctcccat ggggtggctgt atgagggcct gagcagggag 720
 39 aaagcagagg aactgctgtt gttacctggg aaccctggag gggccttctt catccgggag 780
 40 agccagacca ggagaggctc ttactctctg tcagtcggcc tcagccggcc tgcactcttg 840
 41 gaccggatca gacactacag gatccactgc cttgacaatg gctggctgta catctcaccg 900
 42 cgcctcacct tcccctcact ccaggccctg gtggaccatt actctgagct ggcggatgac 960
 43 atctgctgcc tactcaagga gccctgtgtc ctgcagaggg ctggcccgtc cctgggcaag 1020
 44 gatatacccc tacctgtgac tgtgcagagg acaccactca actggaaaga gctggacagc 1080
 45 tccctcctgt tttctgaagc tgccacaggg gaggagtctc ttctcagtga ggggtctccg 1140
 46 gagtccctca gcttctacat cagcctgaat gacgaggctg tctctttgga tgatgcctag 1200
 47 gcccaaagga gaggccaaaa gggaaaccaa ggctgcacac ctagaacccc aattcagcct 1260
 48 cctgggcacc ccagaggcaa ggctgtgcac tcagggaggg aggggtgggac acagagggtgc 1320
 49 atctagggtc ccacctgtac ccttgccttt tccctcttta gcccttagaa gtcacctact 1380
 50 tccctccagt gccatgatcc cacctgcgac ctctagtgcg agtgacagaga aggtgggacc 1440
 51 agggccaggg ttccaaaaag agaataagcc tccctggggg tctgacctag ttagttcttg 1500
 52 agtttggggt ttccagtacc atctggatgc cctgcctgtt gagccccatt ctacatcccc 1560
 53 accattaacc agggccccacc cacaaggtag aaacaacccc tagagtcaac gagaaagtca 1620
 54 ttttcagaaa atctacaagt ctcgttgaga ccaccacat acctcagaag gtaggactgt 1680
 55 ggcctagaag ggaagggaaa gctgagatga tgtcttaccg tagcagcaga tcttggatgg 1740
 56 tccaggctct atgtgacctc cagagcaaag agaaagactt cggacagtct aggtcctcaa 1800
 57 atgtccccc ttgaggacaa cagccccagc tctttttctt tttttttgag acggagtctt 1860

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001

TIME: 14:05:49

Input Set : A:\Bms41211.app

Output Set: N:\CRF3\11212001\I988971.raw

```

58 gccctgttgc ccatgctgga gtgcaatggc acgatctcag ctcaactgcaa cctccatctc 1920
59 ctggattcaa acaattctcc tgccctagcc tccagaatag ctgggattac aggcgtacac 1980
60 caccatgcct ggctaatttt tttgtatttt tagtagacat ggggtttcac cacattggcc 2040
61 aggcgtgtgt cgaactcctg acctcaggtg atccaccac cttggcctcc caaagtgtgt 2100
62 ggattacagg tgtgagccac ggcacccagc ctagctctca gatctctatt tcattttgtg 2160
63 gcttaccatt ccctagcaca ctggccttgc catcttgttg ccgaataaaa aataacacct 2220
64 cttaagtcta gcacactgca gtgaggccag gcacctcagt gctgggcagg ggcatacaga 2280
65 ggtgctaagc cctctctcca caatgccaaag acggagacca cagcctacac caaatccagc 2340
66 ccttgatttc cctgctgcct ccataaacag aaagaggtct gctggatccg ctaagggatc 2400
67 agggagagga agaaagaggg atgggggtgg aggcaccccc tccagtgtct ctactggttc 2460
68 ccaagctaca ggtgggggtg gaaaggcttt atcaggtatc atcaacaggt tctcaattaa 2520
69 agatttgatt tattcaagta tgtgaaaaaa aaaaaaaaaa aaaaaaa 2567
72 <210> SEQ ID NO: 2
73 <211> LENGTH: 261
74 <212> TYPE: PRT
75 <213> ORGANISM: Homo sapiens
77 <400> SEQUENCE: 2
78 Met Gly Ser Leu Pro Ser Arg Arg Lys Ser Leu Pro Ser Pro Ser Leu
79 1 5 10 15
81 Ser Ser Ser Val Gln Gly Gln Gly Pro Val Thr Met Glu Ala Glu Arg
82 20 25 30
84 Ser Lys Ala Thr Ala Val Ala Leu Gly Ser Phe Pro Ala Gly Gly Pro
85 35 40 45
87 Ala Glu Leu Ser Leu Arg Leu Gly Glu Pro Leu Thr Ile Val Ser Glu
88 50 55 60
90 Asp Gly Asp Trp Trp Thr Val Leu Ser Glu Val Ser Gly Arg Glu Tyr
91 65 70 75 80
93 Asn Ile Pro Ser Val His Val Ala Lys Val Ser His Gly Trp Leu Tyr
94 85 90 95
96 Glu Gly Leu Ser Arg Glu Lys Ala Glu Leu Leu Leu Leu Pro Gly
97 100 105 110
99 Asn Pro Gly Gly Ala Phe Leu Ile Arg Glu Ser Gln Thr Arg Arg Gly
100 115 120 125
102 Ser Tyr Ser Leu Ser Val Arg Leu Ser Arg Pro Ala Ser Trp Asp Arg
103 130 135 140
105 Ile Arg His Tyr Arg Ile His Cys Leu Asp Asn Gly Trp Leu Tyr Ile
106 145 150 155 160
108 Ser Pro Arg Leu Thr Phe Pro Ser Leu Gln Ala Leu Val Asp His Tyr
109 165 170 175
111 Ser Glu Leu Ala Asp Asp Ile Cys Cys Leu Leu Lys Glu Pro Cys Val
112 180 185 190
114 Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro Leu Pro Val
115 195 200 205
117 Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp Ser Ser Leu
118 210 215 220
120 Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu Ser Glu Gly
121 225 230 235 240
123 Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp Glu Ala Val
124 245 250 255

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001

TIME: 14:05:49

Input Set : A:\Bms41211.app

Output Set: N:\CRF3\11212001\I988971.raw

```

126 Ser Leu Asp Asp Ala
127           260
130 <210> SEQ ID NO: 3
131 <211> LENGTH: 21
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Description of Artificial Sequence: PY749 PCR
137     PRIMER
139 <400> SEQUENCE: 3
140 cggatcagac actacaggat c                               21
143 <210> SEQ ID NO: 4
144 <211> LENGTH: 20
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence: PY751 PCR
150     PRIMER
152 <400> SEQUENCE: 4
153 cgtcattcag gctgatgtag                               20
156 <210> SEQ ID NO: 5
157 <211> LENGTH: 30
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence: GENE TRAPPER
163     PY750 PRIMER
165 <400> SEQUENCE: 5
166 tactctgagc tggcggatga catctgctgc                     30
169 <210> SEQ ID NO: 6
170 <211> LENGTH: 276
171 <212> TYPE: PRT
172 <213> ORGANISM: Homo sapiens
174 <400> SEQUENCE: 6
175 Met Gly Asn Ser Met Lys Ser Thr Pro Ala Pro Ala Glu Arg Pro Leu
176   1           5           10           15
178 Pro Asn Pro Glu Gly Leu Asp Ser Asp Phe Leu Ala Val Leu Ser Asp
179           20           25           30
181 Tyr Pro Ser Pro Asp Ile Ser Pro Pro Ile Phe Arg Arg Gly Glu Lys
182           35           40           45
184 Leu Arg Val Ile Ser Asp Glu Gly Gly Trp Trp Lys Ala Ile Ser Leu
185           50           55           60
187 Ser Thr Gly Arg Glu Ser Tyr Ile Pro Gly Ile Cys Val Ala Arg Val
188   65           70           75           80
190 Tyr His Gly Trp Leu Phe Glu Gly Leu Gly Arg Asp Lys Ala Glu Glu
191           85           90           95
193 Leu Leu Gln Leu Pro Asp Thr Lys Val Gly Ser Phe Met Ile Arg Glu
194           100          105          110
196 Ser Glu Thr Lys Lys Gly Phe Tyr Ser Leu Ser Val Arg His Arg Gln

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001
 TIME: 14:05:49

Input Set : A:\Bms41211.app
 Output Set: N:\CRF3\11212001\I988971.raw

```

197          115          120          125
199 Val Lys His Tyr Arg Ile Phe Arg Leu Pro Asn Asn Trp Tyr Tyr Ile
200          130          135          140
202 Ser Pro Arg Leu Thr Phe Gln Cys Leu Glu Asp Leu Val Asn His Tyr
203 145          150          155          160
205 Ser Glu Val Ala Asp Gly Leu Cys Cys Val Leu Thr Thr Pro Cys Leu
206          165          170          175
208 Thr Gln Ser Thr Ala Ala Pro Ala Val Arg Ala Ser Ser Ser Pro Val
209          180          185          190
211 Thr Leu Arg Gln Lys Thr Val Asp Trp Arg Arg Val Ser Arg Leu Gln
212          195          200          205
214 Glu Asp Pro Glu Gly Thr Glu Asn Pro Leu Gly Val Asp Glu Ser Leu
215          210          215          220
217 Phe Ser Tyr Gly Leu Arg Glu Ser Ile Ala Ser Tyr Leu Ser Leu Thr
218 225          230          235          240
220 Ser Glu Asp Asn Thr Ser Phe Asp Arg Lys Lys Lys Ser Ile Ser Leu
221          245          250          255
223 Met Tyr Gly Gly Ser Lys Arg Lys Ser Ser Phe Phe Ser Ser Pro Pro
224          260          265          270
226 Tyr Phe Glu Asp
227          275
230 <210> SEQ ID NO: 7
231 <211> LENGTH: 281
232 <212> TYPE: PRT
233 <213> ORGANISM: Mus musculus
235 <400> SEQUENCE: 7
236 Met Gly Asn Ser Met Lys Ser Thr Ser Pro Pro Ser Glu Arg Pro Leu
237 1          5          10          15
239 Ser Ser Ser Glu Gly Leu Glu Ser Asp Phe Leu Ala Val Leu Thr Asp
240          20          25          30
242 Tyr Pro Ser Pro Asp Ile Ser Pro Ile Phe Arg Arg Gly Glu Lys
243          35          40          45
245 Leu Arg Val Ile Ser Asp Glu Gly Gly Trp Trp Lys Ala Ile Ser Leu
246          50          55          60
248 Ser Thr Gly Arg Glu Ser Tyr Ile Pro Gly Ile Cys Val Ala Arg Val
249 65          70          75          80
251 Tyr His Gly Trp Leu Phe Glu Gly Leu Gly Arg Asp Lys Ala Glu Glu
252          85          90          95
254 Leu Leu Gln Leu Pro Asp Thr Lys Ile Gly Ser Phe Met Ile Arg Glu
255          100          105          110
257 Ser Glu Thr Lys Lys Gly Phe Tyr Ser Leu Ser Val Arg His Arg Gln
258          115          120          125
260 Val Lys His Tyr Arg Ile Phe Arg Leu Pro Asn Asn Trp Tyr Tyr Ile
261          130          135          140
263 Ser Pro Arg Leu Thr Phe Gln Cys Leu Glu Asp Leu Val Thr His Tyr
264 145          150          155          160
266 Ser Glu Val Ala Asp Gly Leu Cys Cys Val Leu Thr Thr Pro Cys Leu
267          165          170          175
269 Ala Gln Asn Ile Pro Ala Pro Thr Ser His Pro Ser Pro Cys Thr Ser

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001

TIME: 14:05:49

Input Set : A:\Bms41211.app

Output Set: N:\CRF3\11212001\I988971.raw

270		180		185		190
272	Pro Gly Ser	Pro Val Thr Leu Arg	Gln Lys Thr Phe Asp	Trp Lys Arg		
273		195	200		205	
275	Val Ser Arg	Leu Gln Glu Gly Ser	Glu Gly Ala Glu Asn	Pro Leu Arg		
276		210	215		220	
278	Val Asp Glu Ser	Leu Phe Ser Tyr Gly	Leu Arg Glu Ser	Ile Ala Ser		
279	225	230	235		240	
281	Tyr Leu Ser Leu	Thr Gly Asp Asp Ser	Ser Ser Phe Asp	Arg Lys Lys		
282		245	250		255	
284	Lys Ser Leu Ser	Leu Met Tyr Thr Gly	Ser Lys Arg Lys	Ser Ser Phe		
285		260	265		270	
287	Phe Ser Ala	Pro Gln Tyr Phe Glu	Asp			
288		275	280			

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/988,971

DATE: 11/27/2001

TIME: 14:05:50

Input Set : A:\Bms41211.app

Output Set: N:\CRF3\11212001\I988971.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date